

N<sup>o</sup> 22,781



A.D. 1910

Date of Application, 1st Oct., 1910—Accepted, 5th Jan., 1911

COMPLETE SPECIFICATION.

Improvements in and relating to Amusement Devices.

I, FRED BEAMER CONVERSE, of 11, Crescent Mansions, Elgin Crescent, in the County of Middlesex, Electrical Engineer, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to railways for purposes of recreation and amusement, and consists in improvements according to which the railway track comprises a pyramidal shaped structure upon which one or more passenger cars travel. The cars starting from a platform or platforms, conveniently situated at the base of the structure and serving for the embarkation and disembarkation of passengers, are caused to travel up one side of the structure, down the other side and back to the starting point. In order that passengers may obtain a view in every direction the cars while travelling along the track may be made to revolve slowly.

The invention is illustrated in the accompanying drawings in which

Figures 1 and 2 are front and side elevations of a pyramidal structure with a number of cars travelling round the track;

Figure 3 is a detail drawing illustrating means whereby a car may be rotated around its vertical axis;

Figures 4, 5, 6 and 7 are detail drawings showing a method of attaching the cars to the driving chain or chains, and

Figures 8 and 9 are details of a device employed to prevent sagging of the driving chains.

The structure supporting the rails on which the cars travel may be of brickwork, timber or any other suitable construction, but preferably consists substantially of framework of iron, steel or other material. One form of framework is shown diagrammatically in Figures 1 and 2, and comprises two sloping frames *a* and a horizontal staging *b*. Each frame *a* may consist of one or more sections removably connected together so that the structure may at any time be easily taken down, transported and re-erected at another site. The two frames may be securely braced together by horizontal, diagonal and other bracing *c* to form the pyramidal-like structure, and if necessary they may be suitably stayed by means of raking struts *d*, which may also be framed. The horizontal staging *b* may be carried on stanchions *e* and is located at the base of the structure.

The whole structure is erected on concrete or other foundations and secured in position by holding down bolts or the like. A pair of parallel rails *f* are laid on and secured to the outer faces of the sloping frames, and rails *f*<sup>1</sup> are also fixed to the horizontal staging between the two frames *a*, so as to form a track for the cars travelling from the lower end of one of the frames to the other.

At each angular corner of the structure are suitably mounted large sprocket wheels *g*, round each of which pass the chains *h*<sup>1</sup> for hauling or driving the cars *h*. One or more of the wheels *g* are driven by any suitable means, such as an electric motor; preferably, two of the wheels at the base of the structure are so driven while the wheels at the apex are mounted to turn freely.

The passenger cars *h*, which may be of any desired number and capable of carrying any desired number of persons, are of suitable construction and each

[Price 8d.]

BEST AVAILABLE COPY



*Converse's Improvements in and relating to Amusement Devices.*

is suitably mounted on a vertical shaft *c*. Means are provided for revolving each of the cars around the shaft *c* and such means may consist of an electric motor *i*<sup>1</sup>, Figure 3, actuating gearing *j* meshing with a tooth wheel *j*<sup>1</sup> fixed to the car. The cars are freely suspended in pairs from carriages, (Figures 4—7), adapted to traverse the rails *f*, *f*<sup>1</sup>. Each carriage comprises an axle *k* common to a pair of cars, and two side members *l* connected together by a pair of axles *m* provided with flanged wheels *n*. The side members of a carriage are each connected to two or more specially formed pins of the driving chains *h*<sup>1</sup> as shown in Figure 6.

In order to obviate sagging of the chains, at suitable intervals, and preferably between each pair of carriages to which the cars are attached, is provided a device, Figure 8, comprising a pair of wheels *o* mounted on an axle *p* which is connected to the hauling chains *h*<sup>1</sup> by means of connecting links *q*, Figure 9. These devices are adapted to run on the track rails *f*, *f*<sup>1</sup> and afford support to the chains intermediate of the car carriages.

The sprocket wheels may be journaled in plummer blocks, which plummer blocks may be mounted adjustably in seatings formed in the frames *a*, so that by moving the opposing plummer blocks, near the base of the structure, towards or from each other, the tension or tightness of the chains *h*<sup>1</sup> may be adjusted.

If electric motors are employed for driving the sprocket wheels, worm gearing will be employed so as to prevent the cars descending should the current fail for any reason. The motors may be connected in series or parallel to allow for variations of speed and other purposes.

Current may be conveyed to the motors in any suitable known way.

Three platforms, not shown on the drawings, are preferably provided, one on either side of and one in the centre between the two parallel lines of cars. The centre platform might conveniently be used by passengers embarking and the outer platforms by those disembarking.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A device for recreation and amusement, comprising a substantially pyramidal shaped structure, rail tracks secured to and traversing the sloping faces and base of the structure, one or more carriages having wheeled axles adapted to travel on said track, vertically disposed shafts freely suspended from each carriage, a passenger car rotatably mounted on each shaft, means for revolving said cars on their vertical shafts and means for hauling the carriages along the track.

2. In the device according to the preceding claim, sprocket wheels mounted at the corners of the pyramidal structure, a driving chain or chains attached to the carriages and co-operating with the sprocket wheels to haul the carriages and cars along the track, and means for driving one or more of the sprocket wheels.

3. In the device according to the preceding claim, means for adjusting the tightness of the driving chains.

4. A pyramidal railway track and cars for recreation and amusement purposes, constructed and operating substantially as described and illustrated.

Dated this 1st day of October, 1910.

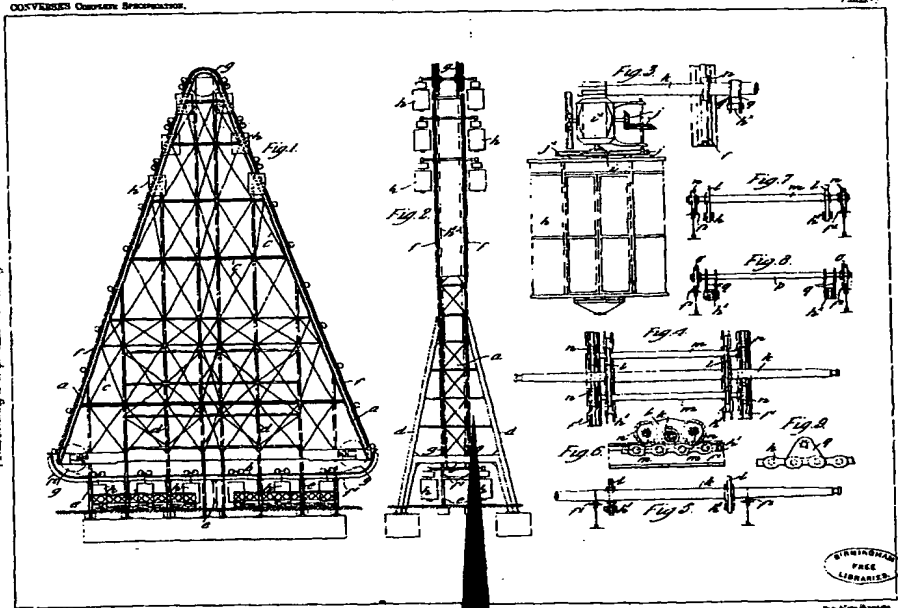
ABEL & IMRAY,  
Birkbeck Bank Chambers, London, W.C.,  
Agents for the Applicant.

Redhill: Printed for His Majesty's Stationery Office, by Love & Malcomson, Ltd.,—1911.

BEST AVAILABLE COPY

A.D. 1910. Oct. 1 N° 23,711.  
CONVARIABLES. Coudray. Specifications.

(This Drawing is a reproduction of the Original in a reduced scale.)



BRITISH  
FREE  
LIBRARY

BEST AVAILABLE COPY

A.D. 1910.  
CONVERSE'S

*[This Drawing is a reproduction of the Original on a reduced scale.]*



BEST AVAILABLE COPY

